Recl. Trav. Chim. Pays-Bas 112, 653-656 (1993)

Author Index

Adam, G., see Cutler, H.G. 467

Akkerman, O.S., see Gruter, G.-J.M. 425

Albrecht-Gary, A.M.

-, Dietrich-Buchecker, C.O., Guilhem, J., Meyer, M., Pascard, C. and Sauvage, J.P.

Dicopper (I) trefoil knots: Demetallation kinetic studies and molecular structures 427

Altona, C., see Quaedflieg, P.J.L.M. 15

Amabilino, D.B.

- and Stoddart, J.F.

A new approach to controlling catenated structures 429

Ansink, H.R.W.

-, Zelvelder, E. and Cerfontain, H.

Sulfonation of 1- and 2-naphthol and their methanesulfonate esters with sulfur trioxide. The influence of initial sulfation on the sulfo-product composition 210

Ansink, H.R.W.

-, Zelvelder, E. and Cerfontain, H.

Sulfonation of a series of naphthalenes containing two different oxy substituents 216

Arnouts, E.G., see Raaijmakers, H.W.C. 511

Baart, A., see Mulder, P.P.J. 22

Bakker, B.H., see Schonk, R.M. 201

Bakker, B.H., see Schonk, R.M. 247

Bakker, B.H., see Schonk, R.M. 457

Banerjee, A.K.

- and Vera, W.

Novel rearrangement during dehydration. Construction of the guaianolide skeleton 259

Barf, T.

-, Jansen, J.F.G.A., van Bolhuis, F., Spek, A.L. and Feringa, B.L. Self-assembling chiral metallo-clefts; synthesis and molecular structure of N,N'-bis(12H-benzo[a]xanthen-12-ylidene)-1,2-ethane-diamine zinc(II)-dichloride complex 376

Basten, J.E.M., see Spijker, N.M. 611

Benckhuijsen, W., see de Goede, A.T.J.W. 567

Berden, J.A., see Groesbeek, M. 237

Berden, J.A., see Groesbeek, M. 303

Bickelhaupt, F., see Gruter, G.-J.M. 425

Bijma, K.

- and Engberts, J.B.F.N.

The effect of chemical structure upon the thermodynamics of micellization of model alkylarenesulphonates. Prediction of micellar properties with the Poisson–Boltzmann model 393

Bocchi, V., see Casnati, A. 384

Boere, B.B., see Mulder, P.P.J. 22

Boere, B.B., see Mulder, P.P.J. 255

Boere, B.B., see Mulder, P.P.J. 287

Boersma, J., see Wissing, E. 618

Bolscher, J.G.M., see van den Broek, L.A.G.M. 82

Boons, G.J.P.H., see Smid, P. 451

Born, J.G.P.

-, van der Wart, H.W.A., Mulder, P. and Louw, R.

Gas-phase oxychlorination of benzene 262

Boryczka, S., see Maślankiewicz, A. 519

Bradshaw, eds., J.S., see Izatt, R.M. 516

Brodesser, G., see Vögtle, F. 325

Broekkamp, C.L.E., see Hermkens, P.H.H. 95

Brouwer, A.M., see Scherer, T. 535

Broxterman, H.J.G., see Smid, P. 451

Bruggink, A., see van der Haest, A.D. 230

Cacciapaglia, R.

-, Mandolini, L. and van Axel Castelli, V.

Alkali-metal-ion-assisted $B_{\rm AL}2$ cleavage of 2-(methoxycarbonyl)-1,3-xylylene-18-crown-5 by benzenemethanethiolate anion 347

Campillo, N., see de Mendoza, J. 367

Casnati, A.

-, Comelli, E., Fabbi, M., Bocchi, V., Mori, G., Ugozzoli, F., Lanfredi, A.M.M., Pochini, A. and Ungaro, R.

Synthesis, conformations and redox properties of diametrical calix[4]arenediquinones 384

Cerfontain, H.

-, Koeberg-Telder, A. and Lerch, U.

Electrophilic substitution of two monohomoperylenes and perylene

Cerfontain, H., see Ansink, H.R.W. 210

Cerfontain, H., see Ansink, H.R.W. 216

Cerfontain, H., see Schonk, R.M. 201

Cerfontain, H., see Schonk, R.M. 247

Cerfontain, H., see Schonk, R.M. 457

Chao, I.

- and Diederich, F.

Catalytic cyclophanes VII. Esterase activity of a bisimidazolyl-cyclophane 335

Chibante, L.P.F., see Heymann, D. 531

Chibante, L.P.F., see Heymann, D. 639

Chittenden, G.J.F., see Raaijmakers, H.W.C. 511

Cleij, M.C.

-, Drenth, W. and Nolte, R.J.M.

Enantioselective cleavage of esters by histidine-containing tripeptides in micellar solutions of various hexadecyltrialkylammonium bromide surfactants 1

Comelli, E., see Casnati, A. 384

Copinga, S.

-, Dijkstra, D., de Vries, J.B., Grol, C.J. and Horn, A.S.

Synthesis and pharmacological evaluation of 5,6,7,8-tetrahydro-6-[propyl[2-(2-thienyl)ethyl]amino]-1,2-naphthalenediol: a novel non-selective dopamine-receptor agonist 137

Cornelisse, J., see Mulder, P.P.J. 22

Cornelisse, J., see Mulder, P.P.J. 255

Cornelisse, J., see Mulder, P.P.J. 287

Cutler, H.G.

-, Yokota, G. and Adam, eds., G.

Brassinosteroids. Chemistry, Bioactivity, and Applications 467

Dargan, P., see Versloot, P. 273

de Boer, J.S.A.M.

- and Stam, C.H.

The influence of substituents on the geometry of the cyclopropane ring. VII The molecular and crystal structures of bicyclopropylidene $(C_3H_4=C_3H_4)$ and (dicyclopropylmethylene)cyclopropane $[(C_3-H_5)_2C=C_3H_4]$. 635

de Boer, T., see Hermkens, P.H.H. 95

de Boer, Th., see Wieringa, J. 143

de Goede, A.T.J.W.

–, Benckhuijsen, W., van Rantwijk, F., Maat, L. and van Bekkum, H. Selective lipase-catalyzed 6-O-acylation of alkyl α -D-glucopyranosides using functionalized ethyl esters 567

de Goede, R.E.Y., see van den Broek, L.A.G.M. 82

de Groot, Ae., see Kesselmans, R.P.W. 226

de Haas, M.P., see Keegstra, E.M.D. 423

de Jong, F., see van Straaten-Nijenhuis, W.F. 317

de Meijere, A., see Schonk, R.M. 457

de Mendoza, J.

-, Prados, P., Campillo, N., Nieto, P.M., Sáchez, C., Fayet, J.-P., Vertut, M.C., Jaime, C. and Elguero, J.

Dipole moments can be used to determine the conformation of calix[4]arenes 367

den Blanken, A., see Wieringa, J. 143

de Vries, E.F.J., see Groesbeek, M. 303

de Vries, J.B., see Copinga, S. 137

de Zoete, M.C.

-, van Rantwijk, F., Maat, L. and Sheldon, R.A.

Selective oxidation of penicillin G with hydrogen peroxide and with enzymatically generated peroxyoctanoic acid 462

Diederich, F., see Chao, I. 335

Dietrich-Buchecker, C.O., see Albrecht-Gary, A.M. 427

Dijkstra, D., see Copinga, S. 137

Dijkstra, G.D.H.

Conformational analysis of 1-arylpiperazines and 4-arylpiperidines

Douwes, M., see Verduyn, R. 464

Drenth, W., see Cleij, M.C. 1

Drenth, W., see Hansen, C.B. 497

Drenth, W., see Huige, C.J.M. 33

Driessen, W.L.

-, Gorter, S., Haanstra, W.G., Laarhoven, L.J.J., Reedijk, J., Goubitz, K. and Seljée, F.R.

Coordination properties of the didentate N,O ligand 1-(2-hydroxyethyl)-3,5-dimethylpyrazole (HL). Crystal structure of [Cu- $(HL)_2(NO_3)_2$ and $[Cu(L)Br]_2$ 309

Edema, J.J.H.

-, Hoogenraad, M., Schoonbeek, F.S., Kellogg, R.M., Kooijman, H. and Spek, A.L.

Alkylation of the S-C-S linkage. Towards lipophilic mono- and ditopic heavy-metal receptors containing trithiane building blocks. Molecular structure of cis-2,4,6-tribenzyl-1,3,5-trithiane 370

Eijckelhoff, C., see Scherer, T. 535

Elguero, J., see de Mendoza, J. 367

Ellermann, L., see Hamm, P. 503

Engbersen, J.F.J., see Verboom, W. 549

Engbersen, J.F.J., see Weijnen, J.G.J. 351

Engbersen, J.F.J., see Weijnen, J.G.J. 525

Engberts, J.B.F.N., see Bijma, K. 393

Erkelens, C., see Mulder, P.P.J. 287

Eveleens, S.M., see Raaijmakers, H.W.C. 511

Fabbi, M., see Casnati, A. 384

Fayet, J.-P., see de Mendoza, J. 367

Feringa, B.L., see Barf, T. 376

Gorter, S., see Driessen, W.L. 309

Gosling, P.A.

-, Sijbesma, R.P., Spek, A.L. and Nolte, R.J.M.

Synthesis and X-ray structure of a novel cavity-containing dinuclear nickel(II) complex 404

Goubitz, K., see Driessen, W.L. 309

Goubitz, K., see Versloot, P. 273

Groen, M.B., see Groen-Piotrowska, E.M. 627

Groen-Piotrowska, E.M.

- and Groen, M.B.

Total synthesis of (+)-13-ethyl-3-methoxygona-1,3,5,9(11)-tetraen-17one via the tandem Claisen-ene strategy 627

-, de Vries, E.F.J., Berden, J.A. and Lugtenburg, J.

The influence of the 5-methyl group in bacteriorhodopsin 303

Groesbeek, M.

-, van Galen, A.J.J., Ippel, J.H., Berden, J.A. and Lugtenburg, J. Three bacteriorhodopsins with ring-didemethylated 6-s-locked chromophores and their properties 237

Grol, C.J., see Copinga, S. 137

Gronowitz, ed., S.

Thiophene and its Derivatives, part five 649

Grootenhuis, P.D.J., see Koymans, L.M.H. 161

-, Akkerman, O.S., Bickelhaupt, F., Smeets, W.J.J. and Spek, A.L. A remarkable halogen-zinc exchange reaction; X-ray crystal structure of (2-iodozincio-1,3-xylylene)-15-crown-4 425

Guilhem, J., see Albrecht-Gary, A.M. 427

Haanstra, W.G., see Driessen, W.L. 309

Haasnoot, C.A.G., see Koymans, L.M.H. 161

Haasnoot, J.G., see Versloot, P. 273

Hamm, P.

-, Ellermann, L., Jauffret, P. and Kaufmann, G.

Perception and generalization of protective groups in the COSYMA system 503

Hansen, C.B.

-, Mul, G., Tabor, R.B.J. and Drenth, W.

Mechanistic study of decomposition of cyclohexyl hydroperoxide catalysed by manganese(III) tetraarylporphyrins 497

Harkema, S., see Verboom, W. 549

Hayashida, O., see Murakami, Y. 421

Heeres, G., see Wieringa, J. 143

Hermant, R.M., see Scherer, T. 535

Hermkens, P.H.H.

-, Ottenheijm, H.C.J., van der Werf-Pieters, J.M.L., Broekkamp, C.L.E., de Boer, T. and van Nispen, J.W.

CCK-A Agonists: endeavours involving structure-activity relationship studies 95

Heskamp, B.M., see van den Broek, L.A.G.M. 82

Hessel, V.

-, Ringsdorf, H., Laversanne, R. and Nallet, F.

 α , ω -Dipolar amphiphiles: Influence of rigid and flexible units on aggregation behavior 339

Heymann, D.

- and Chibante, L.P.F.

Reaction of C₆₀ and C₇₀ with ozone at different temperatures 531

Heymann, D.

- and Chibante, L.P.F.

Reaction of C₆₀, C₇₀, C₇₆, C₇₈, and C₈₄ with ozone at 23.5°C 639

Hezemans, A.M.F., see Huige, C.J.M. 33

Hielkema, W., see Scherer, T. 535

Hoogenraad, M., see Edema, J.J.H. 370

Horn, A.S., see Copinga, S. 137

Huige, C.J.M.

-, Hezemans, A.M.F., Nolte, R.J.M. and Drenth, W.

Molecular-mechanics calculation on oligomers of tert-butyl isocyanide 33

Hulsbergen, F.B.

- and Reedijk, J.

Coordination compounds of tripeptides and pentapeptides containing L-histidyl residues. Studies towards structural models for the active site of copper proteins 278

Ippel, J.H., see Groesbeek, M. 237

Izatt, R.M.

- and Bradshaw, eds., J.S.

The Pedersen Memorial Issue 516

Jaime, C., see de Mendoza, J. 367

Jansen, J.F.G.A., see Barf, T. 376

Jauffret, P., see Hamm, P. 503

Jenneskens, L.W., see Keegstra, E.M.D. 423

Jones, F.N., see Wicks, Jr., Z.W. 565

Katritzky, A.R.

-, Rachwal, B., Rachwal, S., Smith, T.P. and Macomber, D.W.

Preparation of dyes derived from Eriochrome Red B and Acid Alizarin Violet N soluble in organic solvents 552

Kaufmann, G., see Hamm, P. 503

Keegstra, E.M.D.

Kesselmans, R.P.W.

-, Schouten, P.G., Schouten, A., Kooijman, H., Spek, A.L., de Haas, M.P., Zwikker, J.W., Warman, J.M. and Jenneskens, L.W.

Rapid charge migration within 1,4-benzoquinone stacks in the solid phases of 2,5-di-n-decoxy-1,4-benzoquinone 423

Kelderman, E., see Verboom, W. 549

Kellogg, R.M., see Edema, J.J.H. 370

Kerkhof, F., see Scherer, T. 535

-, Wijnberg, J.B.P.A., Schrijvers, R., Sudhölter, E.J.R. and de Groot, Ae.

Conformational analysis of cis-fused eudesm-11-en-4-ols 226

Kleijn, H., see Wissing, E. 618

Klein Gebbink, R.J.M., see Martens, C.F. 400

Koeberg-Telder, A., see Cerfontain, H. 584

Kooijman, H., see Edema, J.J.H. 370

Kooijman, H., see Keegstra, E.M.D. 423

Koomen, G.J.

Synthesis and biological properties of selected nucleoside analogues

Koudijs, A., see Weijnen, J.G.J. 525

Kovács, L.

Methods for the synthesis of α -keto esters 471

Koymans, L.M.H. -, Grootenhuis, P.D.J. and Haasnoot, C.A.G.

Homology model-building studies of human thrombin: optimisation of modelling protocol and comparison with X-ray structure 161

Krijnen, B., see Scherer, T. 535

Kuyl-Yeheskiely, E., see Quaedflieg, P.J.L.M. 15

Laarhoven, L.J.J., see Driessen, W.L. 309 Lanfredi, A.M.M., see Casnati, A. 384

Laversanne, R., see Hessel, V. 339

Lembeck, I., see Schonk, R.M. 247

Lerch, U., see Cerfontain, H. 584

Leusen, F.J.J., see van der Haest, A.D. 230

Leysen, D., see Wieringa, J. 143

Lie, T.S., see Woudenberg, R.H. 557

Louw, R., see Born, J.G.P. 262 Lugtenburg, J., see Groesbeek, M. 237

Lugtenburg, J., see Groesbeek, M. 303 Lugtenburg, J., see Mulder, P.P.J. 22

Lugtenburg, J., see Mulder, P.P.J. 255

Lugtenburg, J., see Mulder, P.P.J. 287

Maat, L., see de Goede, A.T.J.W. 567 Maat, L., see de Zoete, M.C. 462

Maat, L., see Meuzelaar, G.J. 573

Maat, L., see Woudenberg, R.H. 557

Maat, L., see Woudenberg, R.H. 578

Macomber, D.W., see Katritzky, A.R. 552

Mandolini, L., see Cacciapaglia, R. 347

Martens, C.F.

-, Sijbesma, R.P., Klein Gebbink, R.J.M., Spek, A.L. and Nolte, R.J.M. X-ray structure of a molecular basket. Origin of its poor binding properties 400

Maślankiewicz, A.

- and Boryczka, S.

4-Alkoxy-3'-(alkylthio)-3,4'-diquinolinyl sulfides and 4-alkoxy-3-(alkylthio)quinolines 519

Matsuura, S., see Murakami, Y. 421

Meijer, C.W., see Schonk, R.M. 457

Menge, W.M.P.B., see Vollinga, R.C. 123

Meuzelaar, G.J.

-, Woudenberg, R.H., Sinnema, A. and Maat, L.

Synthesis of neopine and its 5β - and 7-substituted derivatives (chemistry of opium alkaloids, part XL) 573

Meuzelaar, G.J., see Woudenberg, R.H. 578

Meyer, M., see Albrecht-Gary, A.M. 427

Miedema, F., see van den Broek, L.A.G.M. 82

Mori, G., see Casnati, A. 384

Morzherin, Y., see Verboom, W. 549

Mul, G., see Hansen, C.B. 497

Mulder, P., see Born, J.G.P. 262

Mulder, P.P.J.

-, Boere, B.B., Baart, A., Cornelisse, J. and Lugtenburg, J.

Synthesis and spectroscopy of nine isomeric methylacephenanthrylenes 22

Mulder, P.P.J.

-, Boere, B.B., Cornelisse, J. and Lugtenburg, J.

Synthesis of dicyclopenta-fused derivatives of phenanthrene 255

Mulder, P.P.J.

-, Olde Boerrigter, J., Boere, B.B., Zuilhof, H., Erkelens, C., Cornelisse, J. and Lugtenburg, J.

Synthesis and spectroscopy of nitroaceanthrylenes and nitroaceanthrenes 287

Murakami, Y.

-, Hayashida, O. and Matsuura, S.

Preparation and characterization of novel cage-type cyclophanes having a helically twisted and cylindrical internal cavity 421

Nagasaki, T.

-, Tajiri, Y. and Shinkai, S.

New water-soluble calixarenes modified with amino acids at the upper rim 407

Nallet, F., see Hessel, V. 339

Ng, A.K.F., see Scherer, T. 535

Nieger, M., see Vögtle, F. 325

Nieto, P.M., see de Mendoza, J. 367

Nolte, R.J.M., see Cleij, M.C. 1

Nolte, R.J.M., see Gosling, P.A. 404

Nolte, R.J.M., see Huige, C.J.M. 33 Nolte, R.J.M., see Martens, C.F. 400

Nolte, R.J.M., see Sijbesma, R.P. 643

Olde Boerrigter, J., see Mulder, P.P.J. 287

Ottenheijm, H.C.J., see Hermkens, P.H.H. 95

Pandit, U.K.

Programmed antibodies as tailor-made catalysts 431

Pappas, S.P., see Wicks, Jr., Z.W. 565

Pascard, C., see Albrecht-Gary, A.M. 427

Peters, J.A., see Venema, F.R. 445

Pieters, R.J.

- and Rebek, Jr., J.

Convergent functional groups XIV. Synthesis and binding studies of new molecular clefts for recognition and catalysis 330

Pikkemaat, J.A., see Quaedflieg, P.J.L.M. 15

Plate, R., see Wieringa, J. 143

Ploegh, H.L., see van den Broek, L.A.G.M. 82

Pochini, A., see Casnati, A. 384

Prados, P., see de Mendoza, J. 367

Put, J., see Versloot, P. 273

Quaedflieg, P.J.L.M.

-, Pikkemaat, J.A., van der Marel, G.A., Kuyl-Yeheskiely, E., Altona, C. and van Boom, J.H.

Synthesis and physicochemical properties of decanucleotides containing (3' \rightarrow 5')-O-CH₂-O-linkages at predetermined positions 15

Raaijmakers, H.W.C.

-, Eveleens, S.M., Arnouts, E.G., Zwanenburg, B. and Chittenden, G.J.F.

Preparation and catalytic hydrogenolysis of some ω -halogenoalkyl

 β -D-fructopyranosides; a convenient route to simple alkyl β -D-fructopyranosides 511

Rachwal, B., see Katritzky, A.R. 552

Rachwal, S., see Katritzky, A.R. 552

Rebek, Jr., J., see Pieters, R.J. 330

Reedijk, J., see Driessen, W.L. 309

Reedijk, J., see Hulsbergen, F.B. 278 Reedijk, J., see Versloot, P. 273

Reichwein, A.M.

-, Verboom, W. and Reinhoudt, D.N.

Binaphthyl metallomacrocycles for complexation of neutral molecules 358

Reichwein, A.M.

-, Verboom, W. and Reinhoudt, D.N.

Functionalized binaphthyl salophen crown ethers as models for the enzyme urease 595

Reinhoudt, D.N., see Reichwein, A.M. 358

Reinhoudt, D.N., see Reichwein, A.M. 595

Reinhoudt, D.N., see van Straaten-Nijenhuis, W.F. 317

Reinhoudt, D.N., see Verboom, W. 549

Rijk, H., see Wieringa, J. 143

Ringsdorf, H., see Hessel, V. 339

Rissanen, K., see Vögtle, F. 325

Roeters, T., see Wieringa, J. 143

Sáchez, C., see de Mendoza, J. 367

Sauvage, J.P., see Albrecht-Gary, A.M. 427

Scherer, T.

-, Hielkema, W., Krijnen, B., Hermant, R.M., Eijckelhoff, C., Kerkhof, F., Ng, A.K.F., Verleg, R., van der Tol, E.B., Brouwer, A.M. and Verhoeven, J.W.

Synthesis and exploratory photophysical investigation of donorbridge-acceptor systems derived from N-substituted 4-piperidones 535

Schipper, F.J.M., see Smid, P. 451

Schneider, H.-J.

NMR spectroscopy and molecular-mechanics calculations in supramolecular chemistry 412

Schonk, R.M.

-, Bakker, B.H. and Cerfontain, H.

Reactions of cumulated and conjugated dienes with sulfur trioxide 201

Schonk, R.M.

-, Lembeck, I., Bakker, B.H. and Cerfontain, H.

Intramolecular competition in Friedel–Crafts sulfocyclization of ω -(1-naphthyl)-n-alkenes and 1,7-diphenyl-3-heptene on reaction with sulfur trioxide 247

Schonk, R.M.

-, Meijer, C.W., Bakker, B.H., Zöllner, S., Cerfontain, H. and de Meijere, A.

Reactions of methylenecycloalkanes and cycloalkylidenecycloalkanes with sulfur trioxide 457

Schoonbeek, F.S., see Edema, J.J.H. 370

Schouten, A., see Keegstra, E.M.D. 423

Schouten, P.G., see Keegstra, E.M.D. 423 Schrijvers, R., see Kesselmans, R.P.W. 226

Seljée, F.R., see Driessen, W.L. 309

Sheldon, R.A., see de Zoete, M.C. 462

Shinkai, S., see Nagasaki, T. 407

Sijbesma, R.P.
– and Nolte, R.J.M.

Synthesis of concave receptors derived from diphenylglycoluril 643

Sijbesma, R.P., see Gosling, P.A. 404

Sijbesma, R.P., see Martens, C.F. 400

Sinnema, A., see Meuzelaar, G.J. 573

Smeets, W.J.J., see Gruter, G.-J.M. 425

Smid, P.

-, Schipper, F.J.M., Broxterman, H.J.G., Boons, G.J.P.H., van der Marel, G.A. and van Boom, J.H.

Use of (chloromethyl)dimethylphenylsilane in sugar chemistry. Stereo-controlled approach to destomic acid and 1-deoxy-nojirimycin 451

Smith, T.P., see Katritzky, A.R. 552

Soudijn, W., see van Wijngaarden, I. 126 Spek, A.L., see Barf, T. 376

Spek, A.L., see Edema, J.J.H. 370

Spek, A.L., see Gosling, P.A. 404

Spek, A.L., see Martens, C.F. 400 Spek, A.L., see Gruter, G.-J.M. 425

Spek, A.L., see Keegstra, E.M.D. 423

Spijker, N.M.

-, Basten, J.E.M. and van Boeckel, C.A.A.

Unexpected phenomena in glycosylations of acceptors with L-idose configuration 611

Stam, C.H., see de Boer, J.S.A.M. 635

Steenvoorden, J., see Wieringa, J. 143

Stoddart, J.F., see Amabilino, D.B. 429

Sudhölter, E.J.R., see Kesselmans, R.P.W. 226

Tabor, R.B.J., see Hansen, C.B. 497

Tajiri, Y., see Nagasaki, T. 407

Tan, M.C.A.A., see van den Broek, L.A.G.M. 82

Tap, P.G.J.A., see Weijnen, J.G.J. 525

Timmerman, H., see Vollinga, R.C. 123

Timmers, C.M.

-, van der Marel, G.A. and van Boom, J.H.

A note on the solid-phase synthesis of oligosaccharides by the Danishefski approach 609

Tulp, M.Th.M., see van Wijngaarden, I. 126

Ugozzoli, F., see Casnati, A. 384

Ungaro, R., see Casnati, A. 384

van Axel Castelli, V., see Cacciapaglia, R. 347

van Bakel, F., see Wieringa, J. 143

van Bekkum, H., see de Goede, A.T.J.W. 567

van Bekkum, H., see Venema, F.R. 445

van Boeckel, C.A.A., see Spijker, N.M. 611

van Boeckel, C.A.A., see van den Broek, L.A.G.M. 82

van Bolhuis, F., see Barf, T. 376

van Boom, J.H., see Quaedflieg, P.J.L.M. 15

van Boom, J.H., see Smid, P. 451

van Boom, J.H., see Timmers, C.M. 609

van Boom, J.H., see Verduyn, R. 464 van Boom, J.H., see Zuurmond, H.M. 507

van der Klein, P.A.M., see Verduyn, R. 464

van der Marel, G.A., see Timmers, C.M. 609

van der Marel, G.A., see Verduyn, R. 464

van den Berg, K.J.

- and van Leusen, A.M.

Formation and [4 + 2] cycloaddition reactions of 2,3-dimethylene-2,3dihydrothiophene 7

van den Broek, L.A.G.M.

-, Vermaas, D.J., Heskamp, B.M., van Boeckel, C.A.A., Tan, M.C.A.A., Bolscher, J.G.M., Ploegh, H.L., van Kemenade, F.J., de Goede, R.E.Y.

Chemical modification of azasugars, inhibitors of N-glycoproteinprocessing glycosidases and of HIV-I infection. Review and structure-activity relationships 82

van den Meerendonk, A., see Wieringa, J. 143

van der Haest, A.D.

-, Wynberg, H., Leusen, F.J.J. and Bruggink, A.

Towards a rational design for resolving agents. Part V. Substituent effects in the resolution of ephedrine using a series of cyclic phosphoric acids 230

van der Hulst, R., see Wieringa, J. 143

van der Marel, G.A., see Quaedflieg, P.J.L.M. 15

van der Marel, G.A., see Smid, P. 451

van der Marel, G.A., see Zuurmond, H.M. 507

van der Tol, E.B., see Scherer, T. 535

van der Wart, H.W.A., see Born, J.G.P. 262 van der Werf-Pieters, J.M.L., see Hermkens, P.H.H. 95

van Duin, M., see Versloot, P. 273

van Galen, A.J.J., see Groesbeek, M. 237

van Hummel, G.J., see Verboom, W. 549

van Kemenade, F.J., see van den Broek, L.A.G.M. 82

van Koten, G., see Wissing, E. 618

van Leusen, A.M., see van den Berg, K.J. 7

van Nispen, J.W., see Hermkens, P.H.H. 95

van Rantwijk, F., see de Goede, A.T.J.W. 567

van Rantwijk, F., see de Zoete, M.C. 462

van Straaten-Nijenhuis, W.F. -, de Jong, F. and Reinhoudt, D.N.

Macrocyclic carriers in supported liquid membranes 317

van Wijngaarden, I.

-, Tulp, M.Th.M. and Soudijn, W.

Serotonin agonists and antagonists. Pharmacological tools and therapeutics 126

Venema, F.R.

-, Peters, J.A. and van Bekkum, H.

Multinuclear-magnetic-resonance study of the coordination of aluminium(III)-aldarate complexes with calcium(II) in aqueous solution 445

Vera, W., see Banerjee, A.K. 259

Verboom, W.

-, Morzherin, Y., Kelderman, E., Engbersen, J.F.J., van Hummel, G.J., Harkema, S. and Reinhoudt, D.N.

Synthesis of 2,3-dihydro-1H,4H,6H-furo[3,4-b]pyrrolo[1,2-a]quinoline-6a(7H)-carbonitrile; a novel type of intramolecular tetrahydrofuran formation 549

Verboom, W., see Reichwein, A.M. 358

Verboom, W., see Reichwein, A.M. 595

Verduyn, R.

-, van der Klein, P.A.M., Douwes, M., van der Marel, G.A. and van Boom, J.H.

Polymer-supported solution synthesis of a heptaglucoside having phytoalexin elicitor activity 464

Verhoeven, J.W., see Scherer, T. 535

Verleg, R., see Scherer, T. 535

Vermaas, D.J., see van den Broek, L.A.G.M. 82

Versloot, P.

-, Dargan, P., Haasnoot, J.G., Reedijk, J., van Duin, M., Put, J. and Goubitz, K.

Reactivity of zinc dialkyldithiocarbamates towards halogen-substituted olefins 273

Vertut, M.C., see de Mendoza, J. 367

Vögtle, F.

-, Brodesser, G., Nieger, M. and Rissanen, K.

Binding of water and solvent molecules in a 25-membered-ring host compound 325

Vollinga, R.C.

-, Menge, W.M.P.B. and Timmerman, H.

A new convenient route for the synthesis of 4(5)-(ω -aminoalkyl)-1H-

Warman, J.M., see Keegstra, E.M.D. 423

Weijnen, J.G.J.

- and Engbersen, J.F.J.

Catalytic hydrolysis of phosphate esters by metallocomplexes of 1,10phenanthroline derivatives in micellar solution 351

Weijnen, J.G.J.

-, Koudijs, A., Tap, P.G.J.A. and Engbersen, J.F.J.

Hydrolysis of 4-nitrophenyl esters of picolinic acid and N-protected amino acids by metalloenzyme models in vesicular assemblies 525

Wicks, Jr., Z.W. -, Jones, F.N. and Pappas, S.P.

Organic Coatings. Science and Technology. Vol 1: Film Formation, Components, and Appearance 565

Wieringa, J.

-, van den Meerendonk, A., Steenvoorden, J., Heeres, G., van Bakel, F., Roeters, T., van der Hulst, R., den Blanken, A., Leysen, D., de Boer, Th., Rijk, H. and Plate, R.

Monoamine re-uptake inhibiting 1-[2-[(phenoxyphenyl)methoxy]ethyl]piperazines as potential antidepressants 143

Wijnberg, J.B.P.A., see Kesselmans, R.P.W. 226

Wissing, E.

-, Kleijn, H., Boersma, J. and van Koten, G.

Regioselective introduction of functional groups in α -diimines by means of dialkylzinc compounds. Synthesis of functionalized 2- and 3-pyrrolidinone derivatives 618

Woudenberg, R.H.

-, Lie, T.S. and Maat, L.

Reactions of thebaine and 6-demethoxythebaine anions with carbonyl compounds; novel Diels-Alder adducts from 5β -substituted thebaines (chemistry of opium alkaloids, Part XXXIX) 557

Woudenberg, R.H.

-, Meuzelaar, G.J. and Maat, L.

Synthesis of 7-substituted 6-demethoxythebaines and Diels-Alder reaction of 7-methoxy-5 β -methyl-6-demethoxythebaine (chemistry of opium alkaloids, part XLI) 578

Woudenberg, R.H., see Meuzelaar, G.J. 573

Wynberg, H., see van der Haest, A.D. 230

Yokota, G., see Cutler, H.G. 467

Zelvelder, E., see Ansink, H.R.W. 210

Zelvelder, E., see Ansink, H.R.W. 216

Zöllner, S., see Schonk, R.M. 457 Zuilhof, H., see Mulder, P.P.J. 287

Zuurmond, H.M.

-, van der Marel, G.A. and van Boom, J.H.

Potential usefulness of sugar 1,2 thio ortho esters in iodonium-promoted glycosidation 507

Zwanenburg, B., see Raaijmakers, H.W.C. 511

Zwikker, J.W., see Keegstra, E.M.D. 423

Subject Index

abzymes, programmed antibodies, review, 431 aceanthrenes, nitro-, 287 aceanthrylenes, nitro-, 287 acephenanthrylenes, methyl-, 22 acetanilide, 4-chloro-, oxidative metabolism by cytochrome P450, 186 acetonitrile, triethoxy-, α -keto esters, synth., review, 471 (R)-1-acetyl-5-isopropoxy-3-pyrrolin-2-one, thesis, 515 N-acetylneuraminic acid, review, 471 acid alizarin violet N, like dyes, 552 acrylic ester, in lipase-catalyzed 6-O-acylation of α -D-glucopyranosides, acrylonitrile, 2-ethoxy-, α -keto esters, synth., review, 471 active site, in Cu proteins, 278 acylase, in medicinal chemistry, review, 66 N-acyliminium, ion precursor, thesis, 515 7-ADCA, in medicinal chemistry, review, 66 adenine, receptor for hosts, 330 adenylosuccinate lyase, in medicinal chemistry, review, 51 agonist-receptor interaction, in medicinal chemistry, 43 AIDS, in medicinal chemistry, review, 82 aldarate, aluminum calcium complex, ¹H-, ¹³C-, ¹⁷O-, ²⁷Al-NMR, 431 alkali-metal ions, 18-crown-5, catalytic cleavage, 347 alkaloids, see also opium alkaloids; neopine, 573; thebaine with carbonyls, 557; thebaine, 7-substd. 6-demethoxy-, 578 alkanes, book, 41 alkylarenesulfonates, micellization, thermodynamics, 393 alkylidenetungsten(VI), in thesis, 470 alkynes, α -keto esters, synth., review, 471 allene, sulfonation, 201 allylic rearrangement, in neopine synth., 573 aluminum, calcium aldarate complex, ¹H-, ¹³C-, ¹⁷O-, ²⁷Al-NMR, 431 amidoalkylation, molecular cavity from diphenylglycoluril, 643 amine re-uptake, inhibited by piperazines, 143 amines, diphenylalkyl-, modulators of calcium and calmodulin, thesis, amino acids, calixarenes, modification, 407 amino-acid sequence, CCK-A agonists, in medicinal chemistry, review, 95 amperometric biosensors, third generation -, thesis, 39 amphiphiles, dipolar, 339 analgesics, K-opioid receptor agonists, 169 anesthesine, in medicinal chemistry, 43 8-anilino-1-naphthalenesulfonate (ANS), calixarenes, modified with L-cysteine, fluorescence, 407 announcement, Trends in Drug Research, Noordwijkerhout, 200 annulation, furopyrroloquinolinecarbonitrile, 549 [10] annulenes, 1,6-methano-, electrophilic substitution, 584 ANS, see 8-anilino-1-naphthalenesulfonate antagonist-receptor interaction, in medicinal chemistry, 43 antibodies, programmed as tailor-made catalysts, review, 431 anticancer agents, aziridinylquinones, 174 antidepressants, piperazines, 143 antidiarrhea agents, in medicinal chemistry, 43 antiferromagnetism, Cu 1-(2-hydroxyethyl)pyrazole complex, 309 antigens, carbohydrates, book, 650 antiglucocorticoid activity, mifepristone analog, 107 antiprogestagens, 107 antipsychotics, in medicinal chemistry, 43 antisense, in decanucleotides with (3 antitussives, in medicinal chemistry, 43 antiulcer agents, in medicinal chemistry, 43 antiviral activity, in medicinal chemistry, review, 51, 82 6-APA, in medicinal chemistry, review, 66 arabinarate, aluminum calcium complex, ¹H-, ¹³C-, ¹⁷O-, ²⁷Al-NMR, 431 armed", thioglycosyl acceptor, 507 aryl radicals, in benzene gas-phase oxychlorination, 262 arylpiperazines, conformation, 151 arylpiperidines, conformation, 151

asymmetric synthesis, contraceptive gonatetraenone deriv., 627

atropine, in medicinal chemistry, 43 atropisomerism, tert-butyl isocyanide oligomers, MM, 33 autobiographies, chemists, book, 652 aynchronous cycloaddition, 7-substd. 6-demethoxythebaine, 578 aza sugars, in medicinal chemistry, review, 82 aziridinylquinones, SAR, 174 azo dyes, derived from eriochrome red B and acid alizarin violet N, 552 azulene sesquiterpenes, cis-hydro-, thesis, 314 azulene, perhydro-, from dehydration of 1-(trimethylsiloxy)-decalin, 259 bacteriorhodopsins, labeling, thesis, 470; 237 bacteriorhodopsin, 5-methyl influence, 303 **BAL2**, see nucleophilic cleavage of $S_N 2$ type barium, binaphthyl metallomacrocycles, 358 base-induced elimination, thesis, 469 basket molecule, from diphenylglycoluril, crystal structure, 400 benzene, gas-phase oxychlorination, 262 benzenediol, as [2]catenane unit, 429 benzenemethanethiolate, 18-crown-5, cleavage, 347 benzenesulfonates, micellization, thermodynamics, 393 benzodiazepines, nucleosides in medicinal chemistry, review, 51 benzonitrile, gas-phase oxychlorination, 262 1,4-benzoquinone, 2,5-didecyloxy-, charge migration in solid phase, 423 benzo[a]xanthenylidene-1,2-ethanediamine, N,N'-bis-, ZnCl₂ complex, crystal structure, 377 bicyclopropylidene, influence of substituents on geometry, 635 bidentate, 1-(2-hydroxyethyl)pyrazole, 309 binaphthyl metallomacrocycles, complexation, 358 binaphthyl salophen, crown ethers, 595 binary fluid mixtures, thesis, 272 binding, see host-guest chemistry biology, mass spectrometry, book, 236 biomedical polyurethane networks, thesis, 272 bioreduction, aziridinylquinones, 174 biosensors, third generation amperometric -, thesis, 39 biosynthesis, tetrapyrroles, book, 271 bipyridines, cyclomeric - as host, 330 4,4'-bipyridine, as [2]catenane unit, 429 bisimidazolyl-cyclophanes, esterase activity, 335 3-BMC, in medicinal chemistry, review, 66 books, advanced organic chemistry: reactions, mechanism, structure, 468; alkanes and cycloalkanes, chemistry, 41; autobiographies of chemists, 652; biosynth. of tetrapyrroles, 271; brassinosteroids, 467; carbohydrate antigens, 650; chirality in industry, 565; fused pyrimidines, 517; gas-phase ion chemistry, 518; inorganic chemicals handbook, 517; macromolecular science, 316; mass spectrometry in biology, 236; membrane chemistry, 315; natural products, 652; NMR, 651; organic chemistry, 41; organic coatings, vol 1: films, 565; organic reactions, vol. 41, 516; organic synth., vol. 70, 652; organometallic chemistry of transition metals, 467; organometallic chemistry, 315; organophosphorus, 271; Pedersen memorial issue, 516; progress in heterocyclic chemistry, 315; pyrroles, 649; radical ionic systems, condensed phases, 42; reagents for organic synth., 468; Rodd's chemistry of carbon compounds, 2nd suppl., 650; stereochemistry of organic compounds, 42; supramolecular chemistry, 651; tandem organic reactions, 518; thiophenes, 649 boron tribromide, O-demethylation in etorphine analogs, 113 bovine rhodopsins, labeling, thesis, 470

bromination, homoperylene, 584

bromoalkenes, with Zn dialkyldithiocarbamates, 273

N-bromosuccinimide, see succimide, N-bromo-

tert-butyldimethylsilyl, protecting group, 123

tert-butyl isocyanide oligomers, MM, 33

 C_3S_5 , Ni, Pd conducting complexes, 314

butyrophenone, type medicines, 43

C₆₀, with ozone, 531, 639

C₇₀, with ozone, 531, 639

 C_{76} , with ozone, 639

 C_{78} , with ozone, 639

C₈₄, with ozone, 639

CaA, zeolite, in lipase-catalyzed 6-O-acylation of α -D-glucopyranosides,

cage-type cyclophanes, with cylindric and helical cavity, 421

calcium, aluminum aldarate complex, ¹H-, ¹³C-, ¹⁷O-, ²⁷Al-NMR, 431; diphenylalkylamines: modulators of - and calmodulin, thesis, 314

calculation, arylpiperidines, conformation, 151; oxidative metabolism of 4-chloroacetanilide by cytochrome P450, 186

calix[4]arenes, dipole moment, conformation, 367; diquinones, 384; for heavy-metal-ion sensors, thesis, 40; macrocyclic carriers in membranes, review, 317; water-soluble, 407

calix[6] arenes, water-soluble, 407

calmodulin, diphenylalkylamines: modulators of calcium and -, thesis, 314

CAOS, see computer-assisted organic synth.

carban-ions, α -keto esters, synth., review, 471

carbazoles, cyclomeric – as host, 330

carbene adducts, of uridine derivs. in medicinal chemistry, review, 51

carbohydrates, aluminum calcium aldarate, ¹H-, ¹³C-, ¹⁷O-, ²⁷Al-NMR, 431; antigens, book, 650; destomic acid and 1-deoxynojirimycin, 451; for chiral products, thesis, 314; α -D-glucopyranosides, lipase-catalyzed 6-O-acylation, 567; glycosylation of acceptors with L-idose configuration, 611; ω-halogenoalkyl-β-D-fructopyranosides, 511; heptaglucoside, solid-phase synth., 464; nucleoside analogs in medicinal chemistry, review, 51; sialyltransferases, thesis, 470; solid-phase synth., 609; sugar 1,2-thio ortho esters, 507

carbon, C_{60} and C_{70} with ozone, 531; C_{60} , etc., with ozone, 639

carbon-13, in labeled drugs, 191

carbon-14, in labeled drugs, 191

carbonium ions, hypervalently coordinated, gas-phase chemistry, thesis,

carbyl sulfates, naphthols, 210; with naphthylalkenes and diphenylheptene, 247

carbyl sulfate, from SO₃ and dienes, 201

carfentanyl, in medicinal chemistry, 43

catalysis, 18-crown-5, cleavage by alkal-metal ions, 347; esterase activity of imidazolyl-cyclophanes, 335; hydrolysis of phosphate esters by 1,10-phenanthroline metallocomplexes, 351; iodonium in glycosidation by sugar 1,2-thio ortho esters, 507; lipase-catalyzed 6-O-acylation of α -D-glucopyranosides, 567; programmed antibodies, review, 431; 2-pyridinecarboxylic acid 4-nitrophenyl esters, hydrolysis, 525; vulcanization by metal compds., thesis, 469

catechol, as [2]catenane unit, 429

[2] catenanes, contg. benzenediol units, 429

cavity molecule, from diphenylglycoluril, crystal structure, 404; from diphenylglycoluril, 643

CCK (cholecystokinin), in medicinal chemistry, review, 95

CCK-A agonists, in medicinal chemistry, review, 95

CD, see Circular Dichroism

cephalosporins, transformation, in medicinal chemistry, review, 66

cesium ions, 18-crown-5, catalytic cleavage, 347

charge migration, in 2,5-didecyloxy-1,4-benzoquinone in solid phase, 423 charge-transfer fluorescence, donor-bridge-acceptor systems from Nsubstd. 4-piperidones, 535

chemists, autobiographies, book, 652

chirality, N,N'-bisbenzo[a]xanthenylidene-1,2-ethanediamine, 377; carbohydrates for chiral products, thesis, 314; cyclophanes with cylindric and helical cavity, 421; in enantioselective cleavage of esters by histidine-contg. tripeptides, 1; in industry, book, 565; 2-pyridinecarboxylic acid 4-nitrophenyl esters, hydrolysis, 525

4-chloroacetanilide, oxidative metabolism by cytochrome P450, 186

4-chlorobutanoate, in lipase-catalyzed 6-O-acylation of α -D-glucopyranosides, 567

(chloromethyl)dimethylphenylsilane, for destomic acid and 1-deoxynojirimycin, 451

chromophores, in bacteriorhodopsins, 237, 303

circular dichroism (CD), cyclophanes with cylindric and helical cavity,

CIS, see complexating-induced NMR shift

Claisen-ene strategy, contraceptive gonatetraenone deriv., 627

cleavage, 18-crown-5, 347; enantioselective - of esters by histidine-contg.

CMC, see critical micellar concentration

coatings, organic -, vol 1: films, book, 565

cobalt, 1-(2-hydroxyethyl)pyrazole complex, 309; proteins, 278

cocaine, in medicinal chemistry, 43

codeine, 14β-bromo-, in neopine synth., 573

competition, in Friedel-Crafts sulfocyclization of naphthylalkenes and diphenylheptene, 247

complexating-induced NMR shift (CIS), supramolecules, review, 412

complexation, binaphthyl metallomacrocycles, 358; binaphthyl salophen crown ether uranyl complex, 595; NMR and MM of supramolecules, review, 412; 2,4,6-tribenzyl-1,3,5-trithiane with Ag, 370

computational chemistry, thrombin, 161

computer graphics, K-opioid receptor agonists, 169

computer-assisted organic synthesis (CAOS), COSYMA system, 503 condensed phases, radical ionic systems, book, 42

conductors, based on $M(C_3S_5)_2$ and $M(C_3Se_5)_2$, thesis, 314; 2,5-didecyloxy-1,4-benzoquinone in solid phase, 423; dipolar amphiphiles, 339

conformation, arylpiperidines, 151, 151; calix[4]arenediquinones, 384; calix[4]arenes, from dipole moment, 367; cyclophanes with cylindric and helical cavity, 421; deoxynojirimycin, in medicinal chemistry, review, 82; eudesm-11-en-4-ols, 226; tert-butyl isocyanide oligomers, MM, 33; nitroaceanthrylenes and -aceanthrenes, 287; NMR and MM of supramolecules, review, 412

conjugated dienes, sulfonation, 201

contraceptive steroid, gonatetraenone deriv., 627

coordination, Co, Ni, Cu, Zn 1-(2-hydroxyethyl)pyrazole complexes, 309; see complexation; L-histidyl-containing tri-and pentapeptides with Co, Zn, Cu, 278; in WVI alkylidene chemistry, thesis, 470

copper, 1,10-phenanthroline trefoil knot, crystal structure, 427; binding to hosts, 330; 1-(2-hydroxyethyl)pyrazole complex, crystal structure, 309; proteins, 278

COSYMA system, protective groups, CAOS, 503

counter-ion binding, alkylarenesulfonate micellization, 393

critical micellar concentration (CMC), calixarenes, modified with L-cysteine, 407; dipolar amphiphiles, 339

crown ethers, binaphthyl salophen, 595; contg. benzenediol units, 429; macrocyclic carriers in membranes, review, 317; Pedersen memorial issue, book, 516; thia-, 370

15-crown-4, iodo-, with Et₂ZN, iodine-zinc exchange, 425

18-crown-5, 2-(methoxycarbonyl)-1,3-xylylene-, cleavage, 347

crystal structure, (2-iodozincio-1,3-xylylene)-15-crown-4, 425; N,N'-bisbenzo[a]xanthenylidene-1,2-ethanediamine ZnCl₂ complex, 377; calix[4]arenediquinones, 384; Cu 1-(2-hydroxyethyl)pyrazole complex, 309; dicyclopropyl derivs., 635; 2,3-dimethyl-2-butenyl dimethyldithiocarbamate, 273; furopyrroloquinolinecarbonitrile, 549; homoperylene, 584; molecular basket from diphenylglycoluril, 400; molecular cavity from diphenylglycoluril, 404; musk compounds, thesis, 39; pyridine cyclomer, 325; thrombin, 161; 2,4,6-tribenzyl-1,3,5-trithiane, 370

CT fluorescence, donor-bridge-acceptor systems from N-substd. 4piperidones, 535

cumulative dienes, sulfonation, 201

cyanation, decalinone by Me₃SiCN, 259; for methanoretinal, 237

cyanoformate, α -keto esters, synth., review, 471

cyanohydrins, α -keto esters, synth., review, 471

cyclic hydrazines, thesis, 515

cyclic phosphates, for ephedrine resolution, 230

cyclic voltammetry, binaphthyl salophen crown ether uranyl complex, 595; calix[4]arenediquinones, 384

 π -cyclization, α -methoxycarbonyl oxycarbenium ions, thesis, 515

cycloaddition, 7-substd. 6-demethoxythebaine, 578; SO₃ + dienes, 201; thebaine with carbonyls, 557; of 2,3-[4 + 2]-, dimethylene-2,3-dihydro-

cycloalkanes, book, 41; methylene- with SO₃, 457

cycloalkylidenecycloalkanes, with SO₃, 457

cyclodextrines, NMR and MM of supramolecules, review, 412

cyclohexanol, from decompn. of cyclohexyl hydroperoxide, 497

cyclohexanone, from decompn. of cyclohexyl hydroperoxide, 497 cyclomers, macrocyclic carriers in membranes, review, 317

cyclopenta-fused hydrocarbons, methylacephenanthrylenes, 22

cyclopentanthracenes, 287

cyclopent[hi]acephenanthrylene, 255

cyclophanes, imidazolyl-, esterase activity, 335; NMR and MM of supramolecules, review, 412; with cylindric and helical cavity, 421 cyclopropanes, influence of substituents on geometry, 635

cylomeric pyridines, host molecules, 325

L-cysteine, calixarenes, modification, 407

cytochrome P450, oxidative metabolism of 4-chloroacetanilide, 186

cytostatic activity, in medicinal chemistry, review, 51 Danishefski approach, solid-phase synth. of oligosaccharides, 609

Darzens condensation, α -keto esters, synth., review, 471

alin, 1-(trimethylsiloxy)-, dehydration to perhydroazulene, 259 decanucleotides, with $(3' \rightarrow 5')$ -O-CH₂-O- linkage, 15

demetallation, Cu^I 1,10-phenanthroline trefoil knot, kinetics, 427

6-demethoxythebaine, with carbonyls, 557

3-deoxy-p-manno-octulosonic acid, review, 471

deoxynojirimycin, in medicinal chemistry, review, 82

destomic acid, 451

deuterium, in labeled drugs, 191

dialkyldithiocarbamates, Zn -, with haloalkenes, 273

dialkylzinc, in regioselective introduction of functional groups in α -diimines. 618

diasteromeric salts, ephedrine, 230

1-diaza-2-butanone, intermediate in dopamine receptor, 137

diazonium salts, for dyes like eriochrome red B and acid alizarin violet N, 552

(dicyclopropylmethylene)cyclopropane, influence of substituents on geometry, 635

dicylopentaphenanthrenes, 255

didemethylmethanoretinals, 237

didentate, 1-(2-hydroxyethyl)pyrazole, 309

Diels-Alder reaction, 7-substd. 6-demethoxythebaine, 578; etorphine analogs, 113; thebaine with carbonyls, 557

dienes, sulfonation, 201

diethylzinc, iodine-zinc exchange with (2-iodo-1,3-xylylene)-15-crown-4, 425

dihydrothiophene, **2,3-dimethylene-2,3--**, [4+2] cycloaddition, 7 α -dimines, regioselective introduction of functional groups, 618

2,3-dimethyl-2-butenyl dimethyldithiocarbamate, crystal structure, 273

dimethylsulfamoyl, protecting group, 123

1,3,2,4-dioxadithiane tetraoxide, from SO₃ and dienes, 201

1,7-diphenyl-3-heptene, sulfonation, 247

diphenylalkylamines, modulators of calcium and calmodulin, thesis, 314
 diphenylglycoluril, basket molecule from -, crystal structure, 400; cavity molecule from -, crystal structure, 404; cavity molecule from -, 643
 dipolar amphiphiles, 339

dipole moment, calix[4]arenes, conformation, 367

3,4'-diquinolinyl sulfides, 519

directing effect, methoxynaphthol sulfonation, 216

disaccharide, idose-galactose glycosylation, 611

disarmed", thioglycosyl acceptor, 507

dissociation, unimolecular -, in gas-phase rections, thesis, 39

[1,4]dithiino[2,3-c:5,6-c']diquinoline, for 3,4'-diquinolinyl sulfides, 519

dithiocarbamates, Zn dialkyl-, with haloalkenes, 273

donor-bridge-acceptor systems, from N-substd. 4-piperidones, 535; thesis, 40

dopamine re-uptake, inhibited by piperazines, 143

dopamine-receptor agonist, a thienyl naphthalenediol, 137

dressed-micelle model, alkylarenesulfonates, 393

drugs, design for K-opioid receptor agonists, 169; design for thrombin, 161; labeling, 191; see medicinal chemistry; research symposium, Noordwijkerhout, 200

dyes, derived from eriochrome red B and acid alizarin violet N, 552

dynamic NMR, eudesm-11-en-4-ols, 226

electrochemistry, aziridinylquinones SAR, 174; binaphthyl salophen crown ether uranyl complex, 595

electron paramagnetic resonance (EPR), Cu 1-(2-hydroxyethyl)pyrazole complex, 309

electrophilic substitution, homoperylene, 584

elimination, base-induced, thesis, 469

enantioselectivity, cleavage of esters by histidine-contg. tripeptides, 1; 2-pyridinecarboxylic acid 4-nitrophenyl esters, hydrolysis, 525

enthalpy, see thermodynamics

enzymes, binaphthyl salophen crown ethers as urease model, 595; in enantioselective cleavage of esters by histidine-contg. tripeptides, 1; inhibition in medicinal chemistry, review, 51; lipase-catalyzed 6-O-acylation of α -D-glucopyranosides, 567; metallomacrocycles as models, thesis, 470; programmed antibodies, review, 431; 2-pyridine-carboxylic acid 4-nitrophenyl esters, hydrolysis, 525

epoxides, in neopine synth., 573

EPR, see electron paramagnetic resonance

eriochrome red B, like dyes, 552

ester cleavage, enantioselective -, by histidine-contg. tripeptides, 1

esterase activity, imidazolylcyclophanes, 335

esterification, in lipase-catalyzed 6-O-acylation of α -D-glucopyranosides, 567

ethenoisomorphinans, 7-substd. 6-demethoxythebaine, 578; etorphine analogs, 113; thebaine with carbonyls, 557

ethenomorphinans, 7-substd. 6-demethoxythebaine, 578

etorphine, analog from thebaine with carbonyls, 557; analogs, 113

eudesm-11-en-4-ols, conformation, 226; thesis, 273

ferrodoxines, synthetic analogs, thesis, 469

ferromagnetism, anti-, Cu 1-(2-hydroxyethyl)pyrazole complex, 309

films, organic coatings, vol 1, book, 565

fluorescence, calixarenes, modified with L-cysteine, 407; donor-bridge-acceptor systems from *N*-substd. 4-piperidones, 535

5-fluorouracil, prodrug in medicinal chemistry, review, 51

force-field calculations, MM on *tert*-butyl isocyanide oligomers, 33; NMR and MM of supramolecules, review, 412

formate, ethyl cyano-, α -keto esters, synth., review, 471

formylation, homoperylene, 584

Fourier-transform ion-cyclotron resonance (FT-ICR), gas-phase chemistry of hypervalently coordinated carbonium ions, thesis, 272

Fourier-transform IR, bacteriorhodopsins, 303; hyphenated – for polymers, thesis, 39

free radicals, see radicals

Friedel–Crafts reaction, α -keto esters, synth., review, 471; sulfocyclization of naphthylalkenes and diphenylheptene, 247

β-D-fructopyranosides, alkyl – and ω-halogenoalkyl –, 511

D-fructose, for ω-halogenoalkyl β-D-fructopyranosides, 511

FT-ICR, see Fourier-transform Ion-Cyclotron Resonance

FT-IR, see Fourier-transform IR

fullerenes, with ozone, 531, 639

furan, 2-acetyl-, α -keto esters, synth., review, 471

furopyrroloquinolinecarbonitrile, 549

fused pyrimidines, book, 517

G-protein-coupled receptors,, 131; arylpiperidines, conformation, 151

GAMESS, computer program for calculation on oxidative metabolism of 4-chloroacetanilide by cytochrome P450, 186

gas-phase chemistry, hypervalently coordinated carbonium ions, thesis, 272; ions, book, 518; oxychlorination of benzene, 262; unimolecular dissociation, thesis, 39

generalization, protective groups in COSYMA system, CAOS, 503

glucarate, aluminum calcium complex, ¹H-, ¹³C-, ¹⁷O-, ²⁷Al-NMR, 431

α-p-glucopyranosides, lipase-catalyzed 6-O-acylation, 567

glutarimide, nucleosides in medicinal chemistry, review, 51

glycoluril, diphenyl-, basket molecule from -, crystal structure, 400; cavity molecule from -, crystal structure, 404; cavity molecule from -, 643

glycosidases, inhibition, in medicinal chemistry, review, 82

glycosidation, by sugar 1,2-thio ortho esters, 507

glycosylation, acceptors with L-idose configuration, 611

glyoxylate thoacetals, α -keto esters, synth., review, 471

gonatetraenone, deriv., 627

guaianolide, skeleton from 1-(trimethylsiloxy)decalin, 259

haloalkenes, with Zn dialkyldithiocarbamates, 273

Haworth synthesis, methylacephenanthrylenes, 22

heat transfer, in injection moulding, thesis, 469

heavy-metal ions, sensors based on ISFETs, thesis, 40

heavy-metal receptors, 2,4,6-tribenzyl-1,3,5-trithiane, 370 **helices**, *tert*-butyl isocyanide oligomers, MM, 33

Hep-G2, in medicinal chemistry, review, 82

heptaglucoside, having phytoalexin elecitor activity, solid-phase synth., 464; solid-phase synth., 464

3-heptene, 1,7-diphenyl-, sulfonation, 247

heterocyclic chemistry, progress, book, 315

hexadecyltrialkylammonium bromides, surfactants in cleaving esters enantioselectively, 1

high-pressure reaction, contraceptive gonatetraenone deriv., 627

histamine, analogs, 123

histidine, in oligopeptides, coordination with Co, Zn, Cu, 278; in tripeptides, cleaving esters enantioselectively, 1

HIV-I infection, inhibition, in medicinal chemistry, review, 82

homology model building, human thrombin, 161

homoperylene, electrophilic substitution, 584

host-guest chemistry, N,N'-bisbenzo[a]xanthenylidene-1,2-ethanediamine, 377; binaphthyl metallomacrocycles, 358; binaphthyl salophen crown ether uranyl complex, 595; book, 651; calixarenes, modified with L-cysteine, 407; for carbazole and bipyridine cyclomers, 330; cyclophanes with cylindric and helical cavity, 421; imidazolylcyclophanes, esterase activity, 335; macrocyclic carriers in membranes, review, 317; molecular basket from diphenylglycoluril, 400; molecular cavity from diphenylglycoluril, 404, 643; NMR, review, 412; pyridine cyclomers as host molecule, 325; 317–430

5-HT, see serotonin

human thrombin, homology model building, 161

α-hydrazino acids, thesis, 515

cis-hydroazulene sesquiterpenes, thesis, 314

hydrogen peroxide, with penicillin G, 462

hydrolase activity, imidazolylcyclophanes, 335 hydrolysis, binaphthyl salophen crown ether uranyl complex, 595; phosphate esters, catalysis by 1,10-phenanthroline metallocomplexes, 351;

2-pyridinecarboxylic acid 4-nitrophenyl esters, 525 hydroperoxide, cyclohexyl-, decompn., 497

hydrophobicity, calixarenes, modified with L-cysteine, 407

1-(2-hydroxyethyl)pyrazole, coordination with Co, Ni, Cu, Zn, 309

5-hydroxytryptamine, see serotonin

hyperchromicity, UV -, decanucleotides with $(3' \rightarrow 5')$ -O-CH₂-O-linkage, 15

hypervalency, carbonium ions, gas-phase chemistry, thesis, 272

hyphenated FT-IR, polymers, thesis, 39

idose-galactose disaccharide, glycosylation, 611

L-iduronic acid, glycosylation of acceptors with L-idose configuration, 611 imidazoles, (ω -aminoalkyl)-, 123

imidazolylcyclophanes, esterase activity, 335

12-iminobenzo[a]xanthene), ethanediylbis(, ZnCl2 complex, crystal struc-

iminomethylenes), poly(-, MM, 33

immunoglobulines, programmed antibodies, review, 431

industrial manufacture, chiral compounds, book, 565

injection moulding, heat transfer, thesis, 469 inorganic chemicals handbook, book, 517

interfacial tension, alkylarenesulfonate micellization, 393

inulin, for ω -halogenoalkyl β -D-fructopyranosides, 511; from chicory

iodine, Zn exchange in (2-iodo-1,3-xylylene)-15-crown-4 + Et₂Zn, 425 iodonium-promoted glycosidation, by sugar 1,2-thio ortho esters, 507 ions, chemistry in gas-phase, book, 518

IR, bacteriorhodopsins, 303; hyphenated FT-IR on polymers, thesis, 39; nitroaceanthrylenes and -aceanthrenes, 287

ISFETs, for heavy-metal-ion sensors, thesis, 40

isocyanide oligomers, tert-butyl-, MM, 33

isomerization, N,N'-bisbenzo[a]xanthenylidene-1,2-ethanediamine, synanti. 377

isotope effect, labeled drugs, 191

K-opioid receptor agonists, 169

KDO (3-dexoxy-D-manno-2-octulosonic acid), review, 471

a-keto esters, review, 471

kinetics, benzene gas-phase oxychlorination, 262; C₆₀ and C₇₀ with ozone, 531; C₆₀, etc., with ozone, 639; 18-crown-5, cleavage by alkal-metal ions, 347; Cu^I 1,10-phenanthroline trefoil knot, demetallation, 427; cyclohexyl hydroperoxide decompn., 497; in enantioselective cleavage of esters by histidine-contg. tripeptides, 1; hydrolysis of phosphate esters by 1,10-phenanthroline metallocomplexes, 351; 2-pyridinecarboxylic acid 4-nitrophenyl esters, hydrolysis, 525

knot, trefoil, Cu¹ 1,10-phenanthroline complex, crystal structure, 427 labeling, bacteriorhodopsins and bovine rhodopsins, thesis, 470; drugs, 191

lactones, sesquiterpene - from chicory roots, thesis, 40

lamellar lyophases, 339

lipase, catalyzing 6-O-acylation of α -D-glucopyranosides, 567

lipophilic heavy-metal receptors, 2,4,6-tribenzyl-1,3,5-trithiane, 370

liquid membranes, macrocyclic carriers in -, review, 317

lithiation, imidazole, 123

lithium ions, 18-crown-5, catalytic cleavage, 347

local anesthetics, in medicinal chemistry, 43

locked chromophores, in bacteriorhodopsins, 237

longe-range donor-acceptor interaction, thesis, 40

lyophases, lamellar, 339

macrocycles, binaphthyl metallo-, complexation, 358; calix[4]arenediquinones, 384; carriers in membranes, review, 317; cyclophanes with cylindric and helical cavity, 421; metallo- as enzyme models, thesis, 470; metallo-, binaphthyl salophen crown ethers as urease model, 595; pyridine cyclomers as host molecule, 325; receptors in membrane transport, thesis, 40; receptors in membranes, review, 317 macromolecular science, book, 316

magnesium chloride, (dimethylphenyl)silyl-, for destomic acid and 1-deoxynojirimycin, 451

magnetic susceptibility, Cu 1-(2-hydroxyethyl)pyrazole complex, 309 malonates, α -keto esters, synth., review, 471

manganese(III), salen complex, crystal structure, 404; tetraarylporphyrins, catalyst in decompn. of cyclohexyl peroxide, 497

mannarate, aluminum calcium complex, ¹H-, ¹³C-, ¹⁷O-, ²⁷Al-NMR, 431 mass spectrometry, see MS

mechanism, benzene gas-phase oxychlorination, 262; cyclohexyl hydroperoxide decompn., 497; Friedel-Crafts sulfocyclization of naphthylalkenes and diphenylheptene, 247; methoxynaphthol sulfonation, 216; naphthols, sulfonation, 210; organic chemistry, book, 468; radical -, oxidative metabolism of 4-chloroacetanilide by cytochrome P450, 186; SO₃ + dienes, 201; with SO₃ with methylenecycloalkanes and cycloalkylidenecycloalkanes, 457

medicinal chemistry, (ω -aminoalkyl)imidazoles, 123; aza sugars, review, 82; CCK-A agonists, review, 95; dopamine-receptor agonist, 137, 137; etorphine analogs, 113; human thrombin, 161; K-opioid receptor agonists, 169; labeled drugs, 191; mifepristone analog, 107; in nucleo sides, review, 51; penicillin and cephalosporin transformation, review, 66; piperazines inhibiting amine re-uptake, 143; review, 43; serotonin (ant)agonists, 126; serotonin receptor subclasses, 131; special issue, 43 - 199

membrane chemistry, book, 315

membrane transport, macrocyclic carriers in -, review, 317; macrocyclic receptors, thesis, 40

mesogenic amphiphiles, 339

metabolism, oxidative -, 4-chloroacetanilide, by cytochrome P450, 186

metal binding, to hosts, 330

metal ions, 18-crown-5, catalytic cleavage, 347

metal receptors, 2,4,6-tribenzyl-1,3,5-trithiane, 370

metal-catalyzed sulfur vulcanization, thesis, 469

metallo-cleft, N, N'-bisbenzo[a]xanthenylidene-1,2-ethanediamine, 377 metallocomplexes, of 1,10-phenanthroline, catalytically hydrolyzing phosphate esters, 351

metalloenzyme model, 2-pyridinecarboxylic acid 4-nitrophenyl esters, hydrolysis, 525

metallomacrocycles, binaphthyl salophen crown ethers as urease model, 595; binaphthyl –, complexation, 358; enzyme models, thesis, 470

metallovesicular assemblies, in hydrolysis of 4-nitrophenyl esters, 525

methacrylates, α -keto esters, synth., review, 471

methanesulfonates, with naphthols, 210

methanoretinals, 237

1,6-methano[10] annulene, electrophilic substitution, 584

 α -methoxycarbonyl oxycarbenium ions, π -cyclization, thesis, 515

methoxycarbonyl)-1,3-xylylene-18-crown-5, cleavage, 347

methoxymethoxy group, protecting OH in 7-substd. 6-demethoxythebaine,

methoxynaphthol, sulfonation, 216

methylacephenanthrylenes, 22

methylenecycloalkanes, with SO₃, 457

methylenedioxy linkage, in decanucleotides, 15

5-methyl, influence in bacteriorhodopsin, 303

mianserin, labeling, 191

micelles, alkylarenesulfonates, thermodynamics, 393; in hydrolysis of phosphate esters by 1,10-phenanthroline metallocomplexes, 351; platelike, 339; solutions in enantioselective cleavage of esters by histidine-contg. tripeptides, 1

mifepristone, analog, 107

migration of 4-substituent, oxidative metabolism of 4-chloroacetanilide by cytochrome P450, 186

mirtazepin, labeling, 191

MM, see molecular mechanics

MNDO, see molecular mechanics

molecular cavity, see host-guest chemistry

molecular cleft, see host-guest chemistry

molecular design, in medicinal chemistry, 43

molecular dynamics, thrombin, 161

molecular mechanics (MM), arylpiperidines, conformation, 151; binaphthyl metallomacrocycles, 358; binaphthyl salophen crown ether uranyl complex, 595; calix[4]arenes, 367; cyclophanes with cylindric and helical cavity, 421; eudesm-11-en-4-ols, 226; tert-butylisocyanide oligomers, 33; K-opioid receptor agonists, 169; serotonin receptor subclasses, 131; supramolecules, review, 412

molecular modeling, see molecular mechanics

molecular recognition, calixarenes, modified with L-cysteine, 407

molecular-orbital package (MOPAC), arylpiperidines, conformation, 151; K-opioid receptor agonists, 169

monoamine re-uptake, inhibited by piperazines, 143

MOPAC, see molecular-orbital package

morphinan-5,8-dienes, thebaine with carbonyls, 557

morphine, K-opioid receptor agonists, 169

morphinomimetics, in medicinal chemistry, 43

moulding, injection –, heat transfer, thesis, 469

MS, bacteriorhodopsins, 237, 303; dicylopentaphenanthrenes, 255; in biology, book, 236; methylacephenanthrylenes, 22; nitroaceanthrylenes and -aceanthrenes, 287

Müller-Röscheisen reaction, for pyridine cyclomers, 325

musk compounds, X-ray, thesis, 39

N-0437, dopamine-receptor agonist, 137

NANA, review, 471

naphthalenediol, thienyl-, dopamine-receptor agonist, 137

naphthalene, retinals, 237; sultone, 216

1-naphthol, sulfonation, 210,216

2-naphthol, sulfonation, 210,216

ω-(1-naphthyl)-n-alkenes, sulfonation, 247

natural products, book, 652

NBS, see succinimide, N-bromoneopine, 573

networks, biomedical polyurethane -, thesis, 272

neuraminic acid, N-acetyl-, review, 471 neuroleptic action, in medicinal chemistry, 43

nickel, conductors based on Ni(C₃S₅)₂ and Ni(C₃Se₅)₂, thesis, 314; 1-(2hydroxyethyl)pyrazole complex, 309; salen complex, crystal structure,

nitration, homoperylene, 584

nitroaceanthrenes, 287

nitroaceanthrylenes, 287

nitroacetates, α -keto esters, synth., review, 471

4-nitrophenyl ester cleavage, enantioselective -, by histidine-contg. tripeptides, 1

NMR, book, 651; supramolecules, NOEs, review, 412

NMR, ¹H, aluminum calcium aldarate, 431; bacteriorhodopsins, 237, 303; calix[4]arenediquinones, 384; decanucleotides with $(3' \rightarrow 5')$ -O-CH₂-O- linkage, 1D- en 2D-NMR, 15; dicylopentaphenanthrenes, 255; etorphine analogs, 113; eudesm-11-en-4-ols, 226; methylacephenanthrylenes, 22; molecular basket from diphenylglycoluril, 400; naphthols, sulfonation, 210; neopine, 573; nitroaceanthrylenes and -aceanthrenes, 287; with SO₃ with methylenecycloalkanes and cycloalkylidenecycloalkanes, 457; thebaine with carbonyls, 557

NMR, ³H -, labeled drugs, 191

NMR, ¹³C, aluminum calcium aldarate, 431; bacteriorhodopsins, 237, 303; etorphine analogs, 113; neopine, 573; nitroaceanthrylenes and -aceanthrenes, 287; thebaine with carbonyls, 557

NMR, ¹³C, aluminum calcium aldarate, 431; bacteriorhodopsins, 237, 303; etorphine analogs, 113; neopine, 573; nitroaceanthrylenes and -aceanthrenes, 287; thebaine with carbonyls, 557

NMR, ¹⁷O, aluminum calcium aldarate, 431

NMR, ²⁷Al, aluminum calcium aldarate, 431

NOE, see NMR

nojirimycin, 1-deoxy-, 451

19-norsteroids, mifepristone analog, 107

nucleophilic cleavage of S_N2 type (BAL2), 18-crown-5, 347

nucleosides, in medicinal chemistry, review, 51

nucleotides, deca-, with (3' \rightarrow 5')-O-CH₂-O- linkage, 15

3-octulosonic acid, 3-deoxy-D-manno- (KDO), review, 471

oligomers, tert-butyl isocyanides, MM, 33

oligonucleotides, with $(3' \rightarrow 5')$ -O-CH₂-O- linkage, 15

oligopeptides, L-histidyl-containing -, coordination with Co, Zn, Cu, 278

oligopyridine rings, host molecules, 325

oligosaccharides, solid-phase synth., 609

omeprazole, in medicinal chemistry, 43

K-opioid receptor agonists, 169

opium alkaloids, 7-substd. 6-demethoxythebaine, 578; etorphine analogs, 113; neopine, 573; thebaine with carbonyls, 557

opsin shift, in bacteriorhodopsins, 237, 303

organic chemistry, book, 41; reactions, mechanism, structure (book), 468; reagents, book, 468

organic coatings, vol 1: films, book, 565

organic reactions, tandem -, book, 518; vol. 41, book, 516

organic synthesis, vol. 70, book, 652

organometallic chemistry, book, 315; transition metals, book, 467

organophosphorus, book, 271

organozinc, (2-iodozincio-1,3-xylylene)-15-crown-4, 425

ortho esters, in neopine synth., 573; sugar 1,2-thio -, 507

oxalates, α -keto esters, synth., review, 471

1,2-oxathietane dioxide, from SO₃ and dienes, 201

oxidative metabolism, 4-chloroacetanilide, by cytochrome P450, 186 α -oxo esters, review, 471

oxycarbenium ions, α -methoxycarbonyl –, π -cyclization, thesis, 515 oxychlorination, benzene, 262

ozone, with C_{60} and C_{70} , 531; with C_{60} , etc., 639

PAHs, see polycyclic aromatic hydrocarbons

palladium, conductors based on Pd(C₃S₅)₂ and Pd(C₃Se₅)₂, thesis, 314

Pedersen memorial issue, book, 516

penicillins, transformation, in medicinal chemistry, review, 66; - G, with peroxy compds., 462

1,3-pentadiene, sulfonation, 201

pentapeptides, L-histidyl-containing -, coordination with Co, Zn, Cu, 278 peptides, histidine-contg. tri-, cleaving esters enantioselectively, 1; Lhistidyl-containing -, coordination with Co, Zn, Cu, 278; topology, CCK-A agonists, in medicinal chemistry, review, 95

peptidomimetics, CCK-A agonists, in medicinal chemistry, review, 95

perception, protective groups in COSYMA system, CAOS, 503

peroxyoctanoic aicd, with penicillin G, 462

perylene, electrophilic substitution, 584 pethidine, in medicinal chemistry, 43

Ph.D. theses, see theses

phase diagrams, dipolar amphiphiles, 339

phenanthrenes, dicylopenta-, 255

1,10-phenanthroline, Cu^I trefoil knot, crystal structure, 427; functionalized, in hydrolysis of 4-nitrophenyl esters, 525; metallocomplexes catalytically hydrolyzing phosphate esters, 351

phenylalanine ester, enantioselective cleavage by histidine-contg. tripeptides. 1

phosphate esters, catalytically hydrolyzed by phenanthroline metallocomplexes, 351; cyclic - for ephedrine resolution, 230

phosphonates, α -keto esters, synth., review, 471

phosphoranes, α -keto esters, synth., review, 471

phosphorus oxychloride, dehydrating 1-(trimethylsiloxy)decalin to perhydroazulene, 259

phosphorus, organo-, book, 271

photophysics, donor-bridge-acceptor systems from N-substd. 4-piperidones, 535

phytoalexin elecitor activity, heptaglucoside, 464

picolinic acid, hydrolysis of 4-nitrophenyl esters, 525

piperazines, aryl-, conformation, 151; inhibiting amine re-uptake, 143

piperidines, aryl-, conformation, 151

4-piperidones, N-substd. -, donor-bridge-acceptor systems, 535

platelike micelles, 339

PM3 geometry, 131

POCI3, see phosphorus oxychloride

Poisson-Boltzmann model, micellar properties, 393

poly(iminomethylenes), MM, 33

polycyclic aromatic hydrocarbons (PAHs), dicylopentaphenanthrenes, 255; methylacephenanthrylenes, 22; nitroaceanthrylenes and -aceanthrenes, 287

polymer-supported synthesis, see solid-phase synth.

polymers, book, 316; hyphenated FT-IR, thesis, 39

polyurethane, biomedical - networks, thesis, 272

potassium ions, 18-crown-5, catalytic cleavage, 347

PR-TRMC (pulse-radiolysis time-resolved microwave conductivity), in 2,5-didecyloxy-1,4-benzoquinone in solid phase, 423

programmed antibodies, as tailor-made catalysts, review, 431

protection, OH in 7-substd. 6-demethoxythebaine by methoxymethoxy, 578

protective groups, in COSYMA system, CAOS, 503

proteins, see also peptides; thrombin, 161

protein-protein interaction, in medicinal chemistry, 43

proton pump, bacteriorhodopsins, 237, 303

PTAT, dopamine-receptor agonist, 137

pulse-radiolysis time-resolved microwave conductivity (PR-TRMC), in 2,5-didecyloxy-1,4-benzoquinone in solid phase, 423

pyrazoles, cyclomeric - as host, 330; 1-(2-hydroxyethyl)-, coordination with Co, Ni, Cu, Zn, 309

2-pyridinecarboxylic acid, hydrolysis of 4-nitrophenyl esters, 525

[2n](2,6)pyridinophanes, host molecules, 325

pyrimidines, fused -, book, 517

pyrolysis, see thermochemistry pyrroles, book, 649

pyrrolidine nucleosides, in medicinal chemistry, review, 51

pyrrolidinones, from regioselective introduction of functional groups in α -diimines, 618

3-pyrrolin-2-one, (R)-1-acetyl-5-isopropoxy-, thesis, 515

pyruvates, α -keto esters, synth., review, 471

QSAR (quantitative structure-activity relationship), see SAR

Quanta/CHARMm, thrombin, 161

quantitative structure-activity relationship (QSAR), see SAR

quantum chemistry, see molecular mechanics

o-quinodimethane, 2,3-dimethylene-2,3-dihydrothiophene analog, 7

quinolines, 4-alkoxy-3-(alkylthio)-, 519

quinones, aziridinyl-, SAR, 174; calix[4]arenes, 384 radiation-induced conductivity, in 2,5-didecyloxy-1,4-benzoquinone in

solid phase, 423 radical ionic systems, condensed phases, book, 42

radicals, in benzene gas-phase oxychlorination, 262; oxidative metabolism of 4-chloroacetanilide by cytochrome P450, 186

radiolysis, labeled drugs, 191

rational design, resolving agents, 230

reaction mechanism, see mechanism

reactions, organic chemistry, book, 468

reagents, for organic synth., book, 468

rearrangement, allylic -, in neopine synth., 573; 1-(trimethylsiloxy)decalin to perhydroazulene, 259

receptors, affinity for serotonins, 131; affinity of a thienyl naphthalenediol, 137; arylpiperidines, model, 151; K-opioid agonists, 169 redox, calix[4]arenediquinones, 384

reductive cyanation, for methanoretinal, 237

regioselective introduction, functional groups in α -diimines, 618

reserpine, dopamine-receptor agonist, 137

resolution, ephedrine, rational design, 230 retinals, labeling, thesis, 470; 237

retinal, 5-bromo-5-demethyl-, 303

reviews, aza sugars, in medicinal chemistry, 82; CCK-A agonists, in medicinal chemistry, 95; α-keto esters, synth., 471; macrocyclic carriers in supported liquid membranes, 317; medicinal chemistry, 43; NMR and MM in supramolecules, 420; nucleosides in medicinal chemistry, 51; penicillin and cephalosporin transformation, in medicinal chemistry, 66; programmed antibodies as tailor-made catalysts,

rhodium acetate, catalyzing cyclization to a tetralone, 137

rhodopsins, bacterio-, 237; 5-bacterio-, methyl influence, 303; labeling, thesis, 470

rigidity, chromophores in bacteriorhodopsins, 237; dipolar amphiphiles, 339

ring enlargement, in medicinal chemistry, review, 66

ring formation, furopyrroloquinolinecarbonitrile, 549

Rodd's chemistry of carbon compounds, 2nd suppl., book, 650

saccharides, see carbohydrates

salen, metal complexes, crystal structure, 404

salophen, binaphthyl -, crown ethers, 595

SAR, see structure-activity relationship

SCF, see self-consistent field

self-assembly, 2,5-didecyloxy-1,4-benzoquinone in solid phase, 423; 1,2-bismetallo-clefts, benzo[*a*]xanthenylidene-1,2-ethanediamine, 377; [2]catenanes contg. catechol units, 429

self-consistent field (SCF) calculation, oxidative metabolism of 4-chloroacetanilide by cytochrome P450, 186

semi-empirical calculation, arylpiperidines, conformation, 151

sequence alignment, thrombin, 161

serotonin, (ant)agonists, 126; receptor subclasses, 131

sesquiterpenes, cis-hydroazulene -, thesis, 314; lactones from chicory roots, thesis, 40

sialyltransferases, thesis, 470

silane, (1,2-diethoxy-1,2-ethanediyl)bis(trimethyl-, α -keto esters, synth., review, 471

silane, (chloromethyl)dimethylphenyl-, for destomic acid and 1-deoxynojirimycin, 451

silver, 2,4,6-tribenzyl-1,3,5-trithiane complex, 370

silyl, tert-butyldimethyl-, protecting group, 123

silyloxy)-1,2-diethoxyethane, 1,2-bis(trimethyl-, α-keto esters, synth., review, 471

simplified-perturbed-hard-chain equation, on binary fluid mixtures, thesis, 272

SKF 38393, dopamine-receptor agonist, 137

S_N2 cleavage, 18-crown-5, 347

SO₃, see sulfur trioxide

sodium ions, 18-crown-5, catalytic cleavage, 347

solid-phase synthesis, heptaglucoside, 464; oligosaccharides, 609

solvatochromism, donor-bridge-acceptor systems from *N*-substd. 4-piperidones, 535

solvent binding, by cyclomeric pyridines, 325

sorbitol, for chiral products, thesis, 314

SPHC equation, on binary fluid mixtures, thesis, 272

spin distribution calculation, oxidative metabolism of 4-chloroacetanilide by cytochrome P450, 186

spiperone, dopamine-receptor agonist, 137

spirosultones, from methylenecycloalkanes and cycloalkylidenecycloalkanes, 457

stereochemistry, book, 42

stereoselectivity, 2-pyridinecarboxylic acid 4-nitrophenyl esters, hydrolysis, 525

steroids, brassino-, book, 467; contraceptive gonatetraenone deriv., 627; mifepristone analog, 107, 107

structure, organic chemistry, book, 468

structure-activity relationship (SAR), aziridinylquinones, 174; CCK-A agonists, in medicinal chemistry, review, 95; serotonin (ant)agonists, 126

substituent effect, in ephedrine resolution, 230

succinimide, N-bromo- (NBS), homoperylene, bromination, 584

sucrose, for ω -halogenoalkyl β -D-fructopyranosides, 511

sugar 1,2-thio ortho esters, 507

sugar acids, aluminum calcium complex, ¹H-, ¹³C-, ¹⁷O-, ²⁷Al-NMR, 431

sugars, see carbohydrates

sulfanilamide, in medicinal chemistry, 43

sulfonates, micellization, thermodynamics, 393

sulfonation, dienes, 201; homoperylene, 584; methoxynaphthols, 216; methylenecycloalkanes and cycloalkylidenecycloalkanes, 457; 1- and 2-naphthols, 210; naphthylalkenes and diphenylheptene, 247

sulfur trioxide (SO₃), withdienes, 201; with methoxynaphthols, 216; with methylenecycloalkanes and cycloalkylidenecycloalkanes, 457; with 1-and 2-naphthols, 210; with naphthylalkenes and diphenylheptene, 247 sulfur vulcanization, metal-catalyzed –, thesis, 469

sulfur-35, in labeled drugs, 191

sulfur-carbon-sulfur bond, alkylation, 370

β-sultones, from dienes, 201; with naphthylalkenes and diphenylheptene, 247

supported liquid membranes, macrocyclic carriers in -, review, 317

supramolecular chemistry, see host–guest chemistry; book, 651; Pedersen memorial issue, book, 516; 317–430

surface tension, dipolar amphiphiles, 339

surfactants, hexadecyltrialkylammonium bromides in cleaving esters enantioselectively, 1

synthesis design, see CAOS

syn-anti isomerization, N,N'-bisbenzo[a]xanthenylidene-1,2-ethanediamine, 377

tandem Claisen-ene strategy, contraceptive gonatetraenone deriv., 627

tandem organic reactions, book, 518 template structures, thrombin, 161

tetraarylporphyrins, Mn^{III}, catalyst in decompn. of cyclohexyl peroxide,

tetrahydrofurano formation, furopyrroloquinolinecarbonitrile, 549

tetralone, intermediate in dopamine receptor, 137

tetrapyrroles, biosynth., book, 271

thallium(III), nitrate, oxidizing dialkoxycalix[4]arenes, 384

thebaines, 7-substd. 6-demethoxy-, 578; etorphine analogs, 113, 113; with carbonyls, 557

thermochemistry, benzene gas-phase oxychlorination, 262

thermodynamics, micellization of alkylarenesulfonates, 393

theses, (R)-1-acetyl-5-isopropoxy-3-pyrrolin-2-one, 515; bacteriorhodopsins and bovine rhodopsins, labeling, 470; base-induced elimination reactions, 469; binary fluid mixtures, 272; biomedical polyurethane networks, 272; biosensors, third generation amperometric, 39; carbohydrates for chiral products, 314; conductors based on $M(C_3S_5)_2$ and $M(C_3Se_5)_2$, 314; cyclic hydrazines and α -hydrazino acids via N-acylhydrazonium ions, 515; π -cyclizations of α -methoxycarbonyl oxycarbenium ions; oxacyclic carboxylic esters, 515; diphenylalkylamines: modulators of calcium and calmodulin, 314; donorbridge-acceptor systems for detection of longe-range donor-acceptor interaction, 40; eudesm-11-en-ols, 273; gas-phase chemistry of hypervalently coordinated carbonium ions, 272; gas-phase rections, unimolecular dissociation, 39; heat transfer in injection moulding, 469; heavy-metal ions, sensors based on ISFETs, 40; cis-hydroazulene sesquiterpenes, 314; intramolecular coordination in WVI alkylidene chemistry, 470; macrocyclic receptors in membrane transport, 40; metal-catalyzed sulfur vulcanization, 469; metallomacrocycles as enzyme models, 470; musk compounds, X-ray, 39; polymers, hyphenated FT-IR, 39; sesquiterpene lactones and inulin from chicory roots, 40; sialyltransferases, 470; synthetic analogs for ferrodoxines, 469

thiacrown ethers, 370

thiazole, 2-acetyl-, \alpha-keto esters, synth., review, 471

thienyl naphthalenediol, dopamine-receptor agonist, 137

1,2-thio ortho esters, sugar -, 507

thiophene, 2,3-dimethylene-2,3-dihydro-, [4+2] cycloaddition, 7

thiophenes, book, 649

thioquinanthrene, for 3,4'-diquinolinyl sulfides, 519

thiuram sulfides, 273

thrombin, human -, homology model building, 161

transesterification, in lipase-catalyzed 6-O-acylation of α -D-glucopyranosides, 567

transferases, sialyl-, thesis, 470

transition metals, organometallic chemistry, book, 467

transport, macrocyclic carriers in membranes, review, 317

trefoil knot, Cu^I 1,10-phenanthroline complex, crystal structure, 427

triaza[3.3.3]paracyclophanes, with cylindric and helical cavity, 421

2,4,6-tribenzyl-1,3,5-trithiane, crystal structure, 370

trifluoroacetic acid, transforming a tetralone, 137

1-(trimethylsiloxy)decalin, dehydration to perhydroazulene, 259 tripeptides, see peptides

1,3,5-trithiane, 2,4,6-tribenzyl-, crystal structure, 370

tritium, in labeled drugs, ³H-NMR, 191 **tropacaine,** in medicinal chemistry, 43

tryptamine, 5-hydroxy-, see serotonin

tryptamine, 5-hydroxy-, see serotonii tryptamines, receptor subclasses, 131

tumor inhibition, mifepristone analog, 107

tumor inhibition, miterristone analog, 107 tungsten(VI), in alkylidene chemistry, thesis, 470

turnover catalysis, esterase activity of imidazolylcyclophanes, 335

U 50 488, K-opioid receptor agonists, 169

unimolecular dissociation, in gas-phase rections, thesis, 39

uranyl, binaphthyl metallomacrocycles, 358; binaphthyl salophen crown ether complex, 595

urease, binaphthyl salophen crown ethers as enzyme model, 595

urea, binaphthyl metallomacrocycles, complex, 358; complexation by binaphthyl salophen crown ether uranyl complex, 595

UV, bacteriorhodopsins, 237, 303; Cu 1-(2-hydroxyethyl)pyrazole complex, 309; decanucleotides with (3' → 5')-O-CH₂-O- linkage, hyperchromicity, 15; dicylopentaphenanthrenes, 255; methylacephenanthrylenes, 22; nitroaceanthrylenes and -aceanthrenes, 287

vesicular assemblies, in hydrolysis of 4-nitrophenyl esters, 525

viscosity, dipolar amphiphiles, 339

voltammetry, cyclic -, binaphthyl salophen crown ether uranyl complex, 595; calix[4]arenediquinones, 384

vulcanization, metal-catalyzed, thesis, 469

water activity, in lipase-catalyzed 6-O-acylation of α -D-glucopyranosides, 567

Wittig reaction, for 5-bromo-5-demethylretinal, 303 X-ray, see crystal structure xylarate, aluminum calcium complex, 1 H-, 13 C-, 17 O-, 27 Al-NMR, 431 L-xylose, for chiral products, thesis, 314 1,3-xylylene-18-crown-5, cleavage, 347 1,2-xylylene, 2,3-dimethylene-2,3-dihydrothiophene analog, 7 zeolite, in lipase-catalyzed 6-*O*-acylation of α-D-glucopyranosides, 567

zinc, 1,10-phenanthroline complexes, catalytically hydrolyzing phosphate esters, 351; dialkyldithiocarbamates, with haloalkenes, 273; dialkyl–, in regioselective introduction of functional groups in α -diimines, 618; dichloride, N,N'-bisbenzo[a]xanthenylidene-1,2-ethanediamine complex, 377; 1-(2-hydroxyethyl)pyrazole complex, 309; iodine exchange in (2-iodo-1,3-xylylene)-15-crown-4 + Et₂Zn, 425; proteins, 278; 2-pyridinecarboxylic acid 4-nitrophenyl esters, hydrolysis catalyst, 525

